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Boston techies envision TV's on-demand future

By Scott Kirsner  |  December 6, 2004

At the end of a boisterous dinner, after several glasses of good red wine, technology entrepreneur John Landry pulled out his iPaq hand-held and beckoned me over to his side of the table.

"You'll think this is cool," he said. "We call it Tiny TiVo."

Suddenly, his iPaq began playing the opening segment of the "Today" show, recorded that morning. For kicks, Landry had tweaked software made by his company, Adesso Systems of Boston, so that it would transfer television shows recorded on his home PC to his hand-held, allowing him to watch them whenever and wherever he wanted.


Boston isn't typically thought of as a hub of the entertainment industry. But Boston techies are envisioning the future of television, from nifty tricks like Tiny TiVo to massive video-on-demand systems like those sold by Maynard's SeaChange International and deployed by Comcast.

The next generation of TV would hardly be recognizable to Philo Farnsworth, the farm boy who invented the medium. You'll choose exactly which shows you want to watch, and watch them on your schedule, on whatever device is most convenient. You'll even be able to "edit" a show yourself, choosing to watch only the scoring drives from Sunday's Patriots game, or just the stories from the local news that relate to your neighborhood. The ads you see will be tightly targeted, pitching Jordan's Furniture and Brinks Home Security if you've just bought a new house, for instance.

Cable companies, satellite companies, Internet companies, and even phone companies are all angling for a spot at the vanguard of the TV revolution. And Boston-area start-ups like Navic Networks, Gotuit Media, and NetCableTV want to be the arms merchants, supplying the infrastructure and services that will be necessary to support the coming "on-demand" model of television: a medium controlled by the viewer, not by the networks.

"It's a great time to be a consumer," says Will Richmond, president of Broadband Directions, a consultancy in Newton. "You've got lots of companies investing to do things that are adding more value to the consumer's life, giving them more control and more selection."

Here's my take on the companies best positioned to affect the future of television (listed in descending order of how significant a role they're likely to play):

**SeaChange International.**

They're the dominant supplier of video-on-demand systems to US cable companies, which allow customers to watch pay-per-view movies and, increasingly, television shows. (You can thank them for "HBO On Demand," which lets you catch up on those "Curb Your Enthusiasm" episodes.)

Within 18 months, the company plans to start doing "addressable advertising," which will allow cable companies to offer more free on-demand programming, says James Kelso, general manager for broadband systems at SeaChange.

Advertisers on shows like ABC's hit drama "Lost" pay big bucks because they reach a large audience. With on-demand programming, the audience is smaller, but SeaChange will serve up narrowly targeted ads. "You're getting fewer eyeballs, but they're the eyeballs you want," Kelso says.

By delving into the same databases that direct-mail marketers use, SeaChange will be able to insert an
ad for the new Corvette into an on-demand episode of "Lost," because it will know that your current car lease is just about up.

Navic Networks.
This Needham company makes software that renders your set-top box more interactive. During the final presidential debate this fall, for instance, digital cable subscribers in Arizona could rate each candidate's answer to each question. Want to view your current cable bill, including all those pay-per-view movies your daughter ordered? Navic can help. And while this feature hasn't been launched yet, the company will eventually support impulse purchases from QVC or Home Shopping Network using your clicker.

Akamai Technologies.
The Internet will be used to deliver video to your home, which may be stored on your PC, your TiVo server, or another specialized home media server. Some of this video content may be incredibly specialized -- imagine a half-hour of instruction in Ashtanga yoga, or an "Ebert & Roeper"-type show about live theater in Boston. Cambridge-based Akamai, which already helps to distribute large video files over the Internet, is extremely well-positioned here.

Jeremy Allaire's new company.
In the mid-1990s, Allaire's first company, Allaire Corp., helped to simplify the process of building and maintaining a website. Last year, Allaire joined the Cambridge venture capital firm General Catalyst as technologist-in-residence. Now, he's starting a company with backing from General Catalyst. He won't say much, but he's interested in what he calls the democratization of video. "We have this situation where the number of people who can produce video programming is poised to explode, with inexpensive digital cameras and editing tools, and the existing distribution systems can't support it," he says. "You can't have 100,000 people producing shows for cable television. The only thing that can support it is the Internet." We're all familiar with the Internet of text. Coming soon: the Internet of video.

Ucentric Systems.
Once you have one digital PVR (personal video recorder) in your home to store your favorite shows, you suddenly realize that it's tied to just one TV set. How can you start watching last Thursday's "The Apprentice" in the living room but finish in the bedroom? Ucentric allows one main PVR to send shows to smaller, $50 client units attached to other TVs. But the company has been unfocused and slow to gain traction, and competitors like TiVo and Scientific Atlanta are trying to tackle the same problem.

Broadbus Technologies.
Vin Bisceglia, chief executive of the Boxborough company, says he's selling a better video-on-demand system than SeaChange's. "We view them as the first generation," he says. "We use RAM memory, whereas they use spinning hard disks."

Bisceglia says Broadbus's system can support more users less expensively. But the company's customer list fails to impress (Shrewsbury Community Cablevision?), and Kelso at SeaChange vows, "We're going to do everything we can to stop Broadbus dead in their tracks."

Gotuit Media.
Andover-based Gotuit wants to produce an index to shows that you watch on demand. "You can watch only the biggest punches in a boxing match, or only the goals in a lacrosse match," says president Mark Pancarella. Time Warner is testing Gotuit's indexing system in Maine, where it's available to about 30,000 customers.

But ouch: Gotuit did a pivotal deal with the NHL to index the big hits, saves, and goals of NHL hockey games, which are temporarily on ice. And while Pancarella boasts about Gotuit's "very robust intellectual property portfolio," I'm not sure what prevents anyone else from doing indexing of their own, especially giants like Gemstar-TV Guide International.

NetCableTV.
Last November, former Yahoo executive David Graves bought the assets of a defunct Hull company called NetMovies. (NetMovies was started by John Fanning, the uncle of Napster founder Shawn Fanning, and it had aimed to allow viewers to download movies from the Net to their PCs for a $5 monthly subscription.) He is trying to position his new company as an infrastructure supplier.
"We're plumbing," Graves says. "We want to provide the software to do on-demand over the Internet."

Graves wants to work with movie studios and TV networks to help them sell their content by subscription or on an a la carte basis. Those deals will be tough to do, and he'll have to compete with Movielink, an established joint venture of several major studios.

Will Richmond is right: It is a good time to be a consumer. But when I floated the notion that in this on-demand world of the future, I might be able to pare down my monthly cable bill, there was a long silence on the other end of the phone. What if all I wanted to do was watch one "Sopranos" episode a week? Shouldn't the cable company be able to sell me that for less than $80?

"The likelihood of your cable bill going down is uncertain," he said. But watch out, cable profiteers. The Internet may be gaining on you.

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